INDOOR AIR POLLUTION SEMINAR

Speaker Name _____
Topic _____
Date _____
Notes _____

Notes:

Richard Staughnessy - Twilight Zone - Indoor Air Zone
EPA ranked ~~CO~~ Radon & Indoor Air Pollutants as
the no. 1&2 health risks in the U.S.

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Mike Etheridge - editor Indoor Pollution News -

INDOOR AIR POLLUTION SEMINAR

Speaker Name Leon Horowitz, M.D.
Topic Indoor Air Quality & Health.
Date May 2 8:45 -
Notes Specializes in Allergy

BREATHE-EASY AIR DUCT CLEANING

Notes:

98% of time indoors, 68% at home - adults discussed sources of IA problems - Major contaminent of IAQ is cigarette smoke - more formaldehyde in ETS than carpets - the toxic combustion products of ETS are greater than mainstream - development of lung is impaired by ETS exposure in children Radon - most homes low level - EPA 4 pci/l - where did EPA get it - it pulled it out of the air - no one knows what a safe level - extrapolation from minor exposures.

The important issue - if there is factors - amalgam in the mouth (amalgam in sheep show up in fetus) - are these contaminents - health hazards?

* Cigarette smokers have a higher rate of nighttime accidents because CO impairs vision

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Radon - much money to be made - are the home level significant - much less - is still hyped.

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INDOOR AIR POLLUTION SEMINAR

Speaker Name Mr Robert Pfeiffer
Topic Federal Indoor Air Program
Date 9/15 5/2
Notes

Notes:

90% of time indoors - economic impacts tens of billions
Pollutant of the year award" as a result of medical attention

Because of so many sources - difficult to identify
Need to understand the health effects of low level exp - the science isn't there yet

source management is the most effective way to solve problems
OSHA - major surge in issues - ETS & EPA
NIOSH working with EPA on information bulletin
EPA will not or regulate state efforts - will serve as a resource
Budget - skyrocketed
Next year - each regional will have an IAQ contact
feds more money is needed to characterize health effects

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SARA Act has allowed EPA to go forth on its ETS issues

MCS – Controversial - EPA will stand on middle of fence
NAS/NRC - March 91 workshop - a report due soon - will be used to obtain funding

Policy Development –
Promote interdisciplinary forum - curriculum - workshops
- at some pt there will be oversight of funds

Some reductions - but

Mitchell/Chafee –

Axelrad feels these bills will not advance the IAQ problems because the science will ~~not~~ take a long time -

Axelrad feels regulation is not the way to go – he wants to develop guidance of

EPA is going forward with guidance to different groups
See A.9

Pollutant / Source Program –
ETS –

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OR AIR POLLUTION SEMINAR

Afebral

Date

Notes

Notes: ETS - Major Indoor Pollutant -

Exemption for Toxic

keep risk - cancer risk

Now - formal lung cancer RA

Life - training courses

self paced training - learning module / ref. manual

intra agency. current fed activities of res.

Risk Characterization 10 years away - must take immed mes. to control sources

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INDOOR AIR POLLUTION SEMINAR

Speaker Name John Spengler

Topic

Date 4/2

Notes

BREATHE-EASY AIR DUCT CLEANING

Notes:

Some people living in "clean air" have a high burden of pollutant exposure due to IAQ

Due to the demographics - aging of our population concern for ENV disorders - immune differences - cardiovascular - health issues for women - for minorities

healthyness in lifestyle will translate to healthyness in the workplace - people will accept voluntary risks much more readily than involuntary risks - "they will be defined by the courts if govt and employers do not address these risks"

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INDOOR AIR POLLUTION SEMINAR

Speaker Name Spengler
Topic
Date
Notes

Notes:

Comprehensive Indoor Air Policy

1 Define Indoor Environments
- Public vs Private
- State public interest & principle for govt intervention

2. Set Reasonable Goals for Govt Action

3 Determine Effective Mechanisms
- Pollution prevention
- exposure reduction

4 Establish IAQ Standards / Guidelines
- category of building
- targeted population

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INDOOR AIR POLLUTION SEMINAR

Speaker Name Spengler –
Topic _____
Date _____
Notes _____

BREATHE-EASY AIR DUCT CLEANING

Notes:

Issue of setting standards is very confusing
EPA list Contam in IA –
need to devote much res. to IAQ because
of the time we spend indoors –
homes 65%, work or school – 15%
discussed home ventilation systems } all decreased
comm build designs } fresh air exchanges
newer airplanes } due to economic and
the reduction in air exchanges in airplanes resulted
in the ban of smoking" – Spengler –
health – points of entry of pollutants. inhalation
and health effects general – very basic explanation
of what happens when our bodies are exposed
to environmental health hazards – "insults"
Spengler is tracking
children –

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* Sent to Spengler – following new home for 18 mos – measuring lung function every two weeks

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INDOOR AIR POLLUTION SEMINAR

Speaker Name _____

Topic _____

Date _____

Notes _____

BREATHE-EASY AIR DUCT CLEANING

Notes:

to save time - Spingle skipped over ETS slides when onto household products -

EPA - personal monitors - many of the pollutants coming from home exposure:

230 materials emit outgas benzene

730 " " " xylene

will lead to product testing & labeling -

Should we be spending money cleaning dump sites vs addressing IAQ problems

* 45-60% of households in their surveys have severe mold problems - when childrens resp. effects were correlated with those households - high correlation

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* NIH - large new studies on asthma - a great increase over the last 10 yrs

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* Kirk, Smith Study - 1000 times more BAP than any smoke-filled bar - new study

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INDOOR AIR POLLUTION SEMINAR

Speaker Name Kevin Teichman
Topic US Fed EPA IAQ Res Prog
Date _____
Notes Offices inside EPA

BREATHE-EASY AIR DUCT CLEANING

Notes:

Areas of research:

gas filtration, radon mitigation

TEAM Field Studies

Devils Lake, N.D. vs Bayon, NJ - indoor levels in both higher than outdoor in NJ

- Computer based study

- 92 $4 million for baseline buildings - and development of protocols

* sensory irritants of VOC mixtures

* Eval of Cot as a biomarker of ETS - demonstrate that cotinine can be used to measure ETS exposure

NIOSH - Federal Squat team - 3 year waiting list

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INDOOR AIR POLLUTION SEMINAR

Speaker Name _____

Topic _____

Date _____

Notes _____

Notes:

Office build ers BC - 9000 questionaire - available upon request
Teichman -

Uncertainties & Radon - because of extrapolation

DOE is combining results from 16 diff groups would work

Answer of prev. is worth 1/6 of one -

Cause is pol source - not the ventilation -

provide a ventilation for the source that is necessary -

Cfm cubic feet /min/person -

*Lenatis increases in vent do not result in dramatic increase in energy cost - in fact reduced worker productivity costs go up

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Jim Woods & he wrote a paper in 1986 — on energy & cost consideration

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INDOOR AIR POLLUTION SEMINAR

Speaker Name Barry Reed
Topic Legal Implications of IAQ
Date
Notes

Notes:

Reilly told Congress that what the public perceives as health hazards & the reality are divergent -

Sources -

- Naturally Occuring - radon
- building materials
- activity related (tobacco smoke/occupational)

- sick building syndrome

synergistic effects

Regulation of IAQ

- Government - relatively little -

govn works most effectively with crisis not yet

- Government has focused on public info res, remediation

Reasons - there may not be a need for govt to regulate - the market place (i.e. legal) may take care of it

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INDOOR AIR POLLUTION SEMINAR

Speaker Name Lewyn - Texas
Topic _____
Date _____
Notes _____

BREATHE-EASY AIR DUCT CLEANING

Notes:

Radon Program - EPA
- 4 pci/L guidance for remedial action
- standardization of methods

- Toxic Substance Control Act (TSCA) for manufactured products
State regulations of radon
research, education, testing, const standards
Asbestos - change in EPA recommendation - management vs removal

ASHRE Standards are not legally enforceable - but courts will use the acceptable standards

element of liability
- abnormally dangerous product & product defect

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INDOOR AIR POLLUTION SEMINAR

Speaker Name _____

Topic _____

Date _____

Notes _____

Notes:

lawyers recommendation -

- awareness including scientific data.

must remain current on

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INDOOR AIR POLLUTION SEMINAR

Speaker Name Alan Hedge –
Topic _____
Date _____
Notes _____

BREATHE-EASY AIR DUCT CLEANING

Notes:

Symptoms of SBS are all conjecture
SBS - Building Risk Factors from EPI studies (increase symptoms)
- HVAC System
- Open-plan offices
- Office Lighting (fluorescent)
- Evaporative or spray humidifiers

SBS - Unrelated factors
- ventilation rates
- Carbon monoxide & dioxide levels
- VOC & formaldehyde levels
- negative air ion levels

all these contaminants who targeted knees or Alan

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INDOOR AIR POLLUTION SEMINAR

Speaker Name _____
Topic _____
Date _____
Notes _____

BREATHE-EASY
AIR DUCT CLEANING

Notes:

? S.S. Environ Risk Factors
- Air temp above 22°C
- humidity > 50%
- fleece & shelf factors
- ETS exposure — no relation —
his recent studies of sick buildings
are smoke free

* coffee-drinkers complain the least
govt building report more symptoms
clerical workers
stressful jobs } complain more
computer ops } more symptoms

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INDOOR AIR POLLUTION SEMINAR

Speaker Name _____
Topic _____
Date _____
Notes _____

Notes:

Alan Hedge - Good presentor - not particularly believable?
While made last year -
-
sensation → descrimination - division
* currently doing a survey on 18 buildings
Changes in psychological impact changes in biochemistry

Alan Hedge used some very controversial things
Breathing zone system - installed in NJ
localized filtration

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INDOOR AIR POLLUTION SEMINAR

Speaker Name Hal Levine
Topic
Date
Notes

BREATHE-EASY AIR DUCT CLEANING

Notes:

Indoor Air '91 attended by 100 people -
Environmental Engineers, Building engineers and
building integrators
Reports to complete
Radon Meeting
DoD - Risk Assessment
Science and Ethics/Research
It is clear that many of the questions from
the audience concerned with specific illness
associated with particular pollutants
Hal Levine talked about design of building -
one must design a body building to decrease
stress -

stress decreasing
ability to deal with
pollutants, noise &
light

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INDOOR AIR POLLUTION SEMINAR

Speaker Name _____

Topic _____

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Notes _____

BREATHE-EASY
AIR DUCT CLEANING

Notes:

Centrial - to air brought in at workers desk - can be individually controlled

Electrostatic filter used in hosp, etc to remove 0.6 - 1.2 u particles

Source control is more effective than ventilation (~~source~~ dilution)

Levine talked about encapsulating fiberboard - using paint which has lower emissions

Manufacturers will have to disclose emissions before purchase of carpets / ~~workstops~~ & workstations

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INDOOR AIR POLLUTION SEMINAR

Speaker Name Harriet Burg
Topic Brownsols
Date 5/3/91
Notes

BREATHE-EASY AIR DUCT CLEANING

Notes:

Alfatoxin - Carcinogenic toxin produced by fungi
dust mites - most probable cause of childhood asthma
with SBS - you must consider psycogenic illness
Building managers can go along way to diffuse the situation - especially if psycogenic
House dust mites
env. control - low relative humidity
- limit carpeting

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Speaker Name _____

Topic _____

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Notes _____

BREATHE-EASY
AIR DUCT CLEANING

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